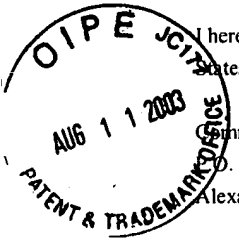


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PATENT  
Attorney Docket No.: 021059-000110US

On August 8, 2003

TOWNSEND and TOWNSEND and CREW LLP

By: Master M. Montenegro

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Edward Shipwash

Application No.: 09/927,424

Filed: August 9, 2001

For: METHOD AND SYSTEM FOR  
RAPID BIOMOLECULAR  
RECOGNITION OF AMINO ACIDS  
AND PROTEIN SEQUENCING

Examiner: Hashemi, Shar S.

Technology Center/Art Unit: 1637

**Declaration of Edward Shipwash, Ph.D.  
Under 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Edward Shipwash, being duly warned that willful false statements and the like are punishable by fine or imprisonment or both (18 U.S.C. § 1001), and may jeopardize the validity of the patent application or any patent issuing thereon, state and declare as follows:

1. All statements herein made of my own knowledge are true, and statements made on information or belief are believed to be true and correct.
2. Currently, I am the Chief Science Officer of NanoBioDynamics, Inc.

3. I am the named and true inventor of the subject-matter disclosed and claimed in the above-captioned application. In addition, I am the sole author and true inventor of subject-matter disclosed in the Edward Shipwash reference (Edward Shipwash, "Microarrays for Amino Acid Analysis and Protein Sequencing," *Physics*, Vol. 1, pp. 1-21 (August 10, 1999) <http://arxiv.org/html/physics/9908021>), which was relied upon by the Examiner in the Office Action mailed on March 14, 2003 in making the prior art rejections. A copy of the reference is attached as Exhibit A.

4. This declaration is provided to address whether, from an objective point of view, relevant disclosures in the above cited Shipwash reference are my work.

The Examiner first cited the reference as teaching a method of detecting in a sample a primary amino acid comprising:

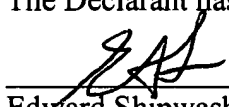
- A) contacting the amino acid with an amino acyl synthetase of said primary amino acid to form a first product,
- B) detecting said first product,
- C) contacting said first product with a tRNA for said primary amino acid to form a second product, and
- D) detecting said second product.

The Examiner next cited the Shipwash reference as disclosing a spatial array for the detection of a primary amino acid in a sample comprising:

- A) spatially separated aminoacyl tRNA synthetases or spatially separated tRNAs for a plurality of the primary amino acids each at a known locus on said array, and
- B) means for contacting said sample with said spatially separated synthetases to form a first product.

The above subject matter and the various embodiments thereof described in the cited Edward Shipwash reference as relied upon by the Examiner are my work which I alone conceived of and constructively reduced to practice.

The Declarant has nothing further to say.

  
Edward Shipwash, Ph.D.

27 July 03  
Date

Attorney Docket No.: 21059-000110  
Client Ref. No.:

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PTO/SB/01A (10-00)

Approved for use through 10/31/2002. OMB 0651-0032  
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## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

As inventor below named inventor(s), I/we declare that:

This declaration is directed to:

- ☐ The attached application, or
- ☒ Application No. 09/927,424, filed on 8/9/01,
- ☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

### FULL NAME OF INVENTOR(S)

Inventor one Edward Shipwash Date: 9 Nov 01

Signature: [Signature] Citizen of: US

Inventor two \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

Inventor three \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

Inventor four \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: \_\_\_\_\_

☐ Additional inventors are being named on \_\_\_\_\_ additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
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